FIRST AID

Agenda

Prevent Shock
Heat Injuries
Potential Hazards
MEDEVAC
Cold Weather Injuries

Prevent/Control Shock

PREVENT SHOCK

- Identify the procedures for preventing/controlling shock

  - Identify the signs and symptoms of shock

  - Position the casualty to prevent/control shock

  - Take additional measures to prevent/control shock

PREVENT SHOCK

- Identify the signs and symptoms of shock:

- Loss of body fluids from severe bleeding, burns, vomiting, diarrhea, and severe heat illness

- Sweaty but cool (clammy) skin, pale skin color, and/or blotchy or bluish skin around the mouth

- Nausea, anxiety (casualty restless or agitated)

- Increased breathing rate, mental

PREVENT SHOCK

- Position the casualty to prevent/control shock

  - Move casualty to cover if possible

  - Stop heavy bleeding and treat major wounds

  - Normal shock position: On Back, legs elevated

PREVENT SHOCK

- Shock positions for special injuries
  - Suspected fracture of the spine
  - Open chest wound
  - Open abdominal wound
  - Minor head wound
  - Unconsciousness

PREVENT SHOCK

- Additional measures to prevent/control shock

  - Reassure the casualty

  - Loosen the casualty’s clothing

  - Keep the casualty from being too warm or too cold

  - Seek help or evacuate the casualty

PREVENT SHOCK

- Seek help or evacuate casualty

  - Have qualified personnel administer intravenous fluids to help control shock

  - Evacuate the casualty if practical

  - If you leave the casualty to seek help, tell him you are going to get help and will return. Turn the casualty's head so fluids can drain from his mouth

Recognize and Give First Aid for Heat Injuries

Objectives

- Identify the 3 Major Heat Injuries and the Treatment for Each
- Be Aware of the Factors Influencing Heat Injuries
- Identify Measures to Prevent Heat Injuries

Types of Heat Injuries

- **Heat Cramps**
  - **Cause:** loss of salt from the body

  - **Symptoms:**
    - Painful cramps of major muscle groups
    - May occur alone or with heat exhaustion
    - Normal body temperature
  - Skin wet with perspiration
  - Unusual thirst

Types of Heat Injuries

- **Heat Cramps**

  - Treatment:

    -Move casualty to cool, shaded area

    -Loosen clothing around neck, waist and boots

    -Slowly drink one quart of cool water

    -Evacuate if cramps continue

Types of Heat Injuries

- **Heat Exhaustion**

- **Cause:** loss of salt and water from the body

- **Symptoms :**

- Profuse sweating, headache, loss of appetite

- Weakness or faintness, tingling sensation in hands and feet , nausea, and vomiting

- Pale, difficult breathing, irregular heart beat

- Skin cool and moist

- Heat cramps, mental confusion

Types of Heat Injuries

- **Heat Exhaustion**

- Treatment:

- Move casualty to cool shaded area

- Position casualty on his back with legs elevated

- Remove clothing around his neck and waist

- Loosen his boots

- Pour water over casualty and fan him

- Slowly drink one quart cool water

- If casualty cannot drink water have qualified person start an I.V.

- Evacuate

Types of Heat Injuries

- **Heat Stroke** -MEDICAL EMERGENCY-

  - **Cause:** Shut down of the bodies heat control mechanism

  - **Symptoms:**

  - Headache, dizzy, weakness, nausea, vomiting, and excessive warmth

  -Skin that is hot, dry, and red

  -Weak and rapid pulse and respiration

  -Seizures, sudden loss of consciousness

Types of Heat Injuries

- **Heat Stroke** -<u>MEDICAL EMERGENCY</u>-

  -Treatment:

  -Send someone to get medical help

  -Move casualty to cool, shaded area

  -Loosen or remove casualty's outer clothing

  -Position casualty on his back with legs elevated

  -Poor water over him while fanning vigorously, and massaging his arms and leg

  -Drink one quart of water if able. If unable to drink start an I.V.

HEAT STROKE

Evacuate as soon as possible

Heat stroke treatment is labor intensive

Influencing Factors

- Overweight/Physical fitness level
- Heavy meals/hot foods
- Alcohol/Drugs
- Fever
- Tight clothing

Acclimatization

Acclimatization

- Two week’s or more to acclimate
- Begins with first exposure
- Two 50 minute exposure’s daily
- Gradually increase work load
- Soldier’s perform poorly if not properly acclimated

Preventing Heat Injuries

- Replace water
- Avoid excess salt
- Maintain acclimatization
- Maintain good Physical condition

Preventing Heat Injuries

Don’t wait until you are thirsty

Preventing Heat Injuries

WBGT Temperatur
Index

HEAT INJURY PREVENTION CHART

Cat	WBGT	Water qt/hr	W/R
White	78-82	1/2	continuous
Green	82-85	1/2	50/10
Yellow	85-88	1	45/15
Red	88-90	1 1/2	30/30
Black	90+	2	20/40

Preventing Heat Injuries

Add 10^{0} to WBGT Index

Training

Potential Hazards

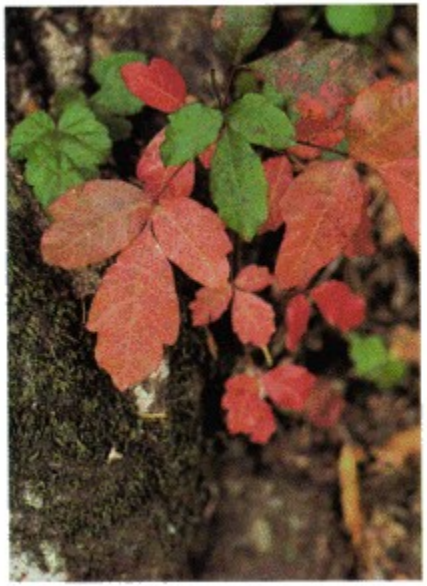
Potential Hazards

- Snake bites
  - Pit Viper/Viper
  - Elapid
- Injurious Plants
  - Poison Sumac
  - Poison Ivy
  - Poison Oak

Potential Hazards

Potential Hazards

IVY



OAK

SUMAC

Pit Viper/Viper

- Sign and symptoms:

- Severe pain, swelling, change in skin color within 5-10 min.

- Further swelling, change in color, bleeding blisters, numbness in affected area after several hours.

- Other sign that may occur (Weakness, rapid pulse, nausea, vomiting, shortness of breath, shock, sweating)

Elapids

- Sign and symptoms:

- Symptoms usually develop within 1 to 7 hours after the bite.

- Blurred vision, drooping eyelids, slurred speech, drowsiness, increased salivation and sweating.

- If not treated promptly, the following symptoms may appear.

- Vomiting, shock, breathing difficulties, paralysis, convulsion, coma

Treatment

- The definitive treatment of a poisonous snakebite can only be provide by a physician in a hospital.
- Calm and reassure the victim
- Remove clothing and jewelry from the affected area before swelling occurs
- Apply a wide constrictive band 2 to 4 inches above and below the snakebite.
- Check victim’s vital signs
- Immobilize the affected area with a loose

Treatment

- Cover the wound with a dressing and apply a cool pack to the snakebite if available
- **Do not** cut open the snakebite and suction the venom
- Transport victim immediately to a medical facility

Injurious plants

Poison Sumac ***Poison Ivy***
Poison Oak

- Signs and symptoms:

- Redness and swelling of involved skin, headache, burning sensation on involved parts of the body

- Skin eruptions (rash), skin itching, blisters on the involved skin

- When ingested (swallowed), usually there is only a burning sensation in the throat. Sometimes inflammation of the stomach

Injurious plants

- Prevention:

  - The only effective protection is to avoid contact with the plant.

  - Most injuries can be prevented by taking precautions and making observations in the area.

  - Wear clothes and foot protection at all times

  - Avoid touching unfamiliar plants or allowing them to touch you

Injurious plants

- Prevention (cont):

  - Don’t chew on any part of an unfamiliar plant. Don’t use unfamiliar plants for fuel or cooking materials.

  - Places where poisonous plants usually grow:

    - Almost every state in the U.S.

    - Vines, creeping on the ground and climbing trees

    - Vines mixed with bushes and weeds

Injurious plants

- First aid:

  - Treatment should be provided by a physician in a hospital.

  - Calm and reassure the victim.

  - Thoroughly wash the exposed areas.

  - Confine the washing to the affected area.

  - Wash the area several times in succession.

Injurious plants

- First aid (cont):

  - Do not dress the affected area.

  - Avoid contact with the contaminated water.

  - Contaminated clothing should be laundered before reuse.

  - Thoroughly wash your hands and any part of your body which come in contact with the irritant and remove clothing exposed to the irritant.

MEDEVAC Request

DETERMINE ORDER OF CASULITY PRECEDENCE

FIRST PRIORITY: URGENT

- Casualties with serious respiratory problems.
- Casualties with severe blood loss.
- Casualties with second and third degree burns of the face, neck, or perineum.
- Casualties with closed head injuries, with decreasing mental status.
- Casualties with poor blood circulation in a limb or with no detectable circulation in a limb.

DETERMINE ORDER OF CASULITY PRECEDENCE
(cont)

SECOND PRIORITY: PRIORITY

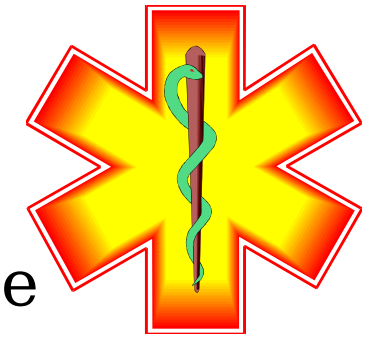
- Casualties with chest wounds
- Casualties with abdominal wounds.
- Casualties with extensive, serious eye injury.
- Casualties with fractures.
- Casualties with serious second and third degree burns not involved the face, neck, or perineum.

DETERMINE ORDER OF CASULITY PRECEDENCE
(cont)

THIRD PRIORITY: ROUTINE PRIORITY

- Casualties with injuries which have been stabilized and do not threaten the casualty with loss of life or limb.
- Casualties with injuries so severe that only extensive and complicated medical treatment can prolong their life.

DUSTOFF REQUEST



LINE 1: 6 Digit Grid of Pickup Site

LINE 2: Radio FREQ and Call Sign

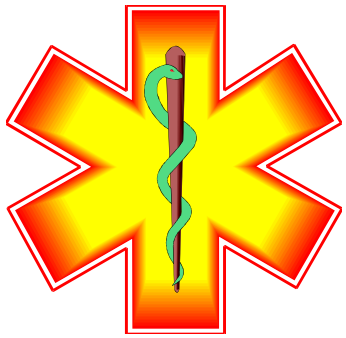
LINE 3: Number of Patients by Precedence (urgent,priority,routine)

LINE 4: Special Equipment Required (hoist, sked, jungle penetrator)

LINE 5: Number of Patients by Type (litter/ambulatory)

LINE 6: Security of Pickup Site. During Peacetime list the number and type of wound, injury, or illness

DUSTOFF REQUEST
(cont)

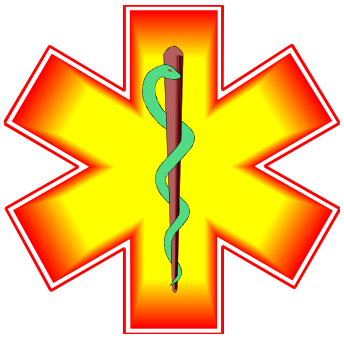


LINE 7: Method of Marking Pickup Site

LINE 8: Patient Nationality and Status

LINE 9: NBC Contamination Area. In Peacetime

DUSTOFF REQUEST
(cont)



MEDEVAC FREQUENCY:

- Every training area has its own unique MEDEVAC fr
- OC/Ts must be know the frequency for their training

Cold Weather Injuries

Cold weather injuries

Chilblain

Immersion syndrome (Trench Foot)

Frostbite

Hypothermia

Chilblain

Cause

Prolonged exposure of bare skin to cold temp (50*F

Symptoms

- red, swollen, hot, tender and/or itching skin
- open sores or bleeding lesions from continued exp

Treatment

- apply local warming
- do not rub or massage
- apply field dressing
- evacuate when practical

Immersion syndrome

Cause

Prolonged exposure, hours to days, to cold (50*F)
and wet conditions

Symptoms in phase

• blisters, swelling, redness, hot skin and bleedin
*affected part cold and without pain. Week pulse a
*feels hot (burning) and shooting pain
*pale skin, cyanosis (blue color) around nail and li
decreased pulse

Immersion syndrome (cont)

Treatment

- rewarm affected area in warm air. Do not rub/m
- replace wet clothing with dry and warm clothing
- elevate affected area to reduce swelling
- protect from injury and infection
- evacuate as soon as practical

Frostbite

Cause

Caused by the freezing of water in the skin and ot
Tissues. It occurs when bare skin is exposed to fre
Temp (below 32*F).

Most cases involve the feet, hands, face, and ears

Two categories of frostbite, Superficial and Deep

Superficial Frostbite

Involves injury to skin and tissue just below the s

- reddish or grayish color and sudden blotching
- tingling sensation followed by numbness
- blisters and flaking of skin after 24 to 36 hours

Deep Frostbite

Occurs when tissue below the skin freezes. This in
muscle and bone tissue.

- loss of feeling, pale yellow waxy skin
- solid flesh, wooden feeling
- blisters occur 12 to 36 hours after freezing
- red discoloration after 1 to 5 days if not treated

Frostbite Treatment

- move casualty to shelter and loosen clothing
- remove jewelry
- gradually warm the casualty, apply local warmin
- protect from additional injury
- evacuate as soon as possible

Do not

- expose to extreme heat, or apply ointment
- rub, massage or soak affected area
- give alcohol or tobacco

Hypothermia

Cause

Hypothermia is caused by continued exposure to l
or rapid dropping temperatures, cold moisture, sn
or ice. May cause death if not treated promptly.

Classified as Moderate and Severe Hypothermia

Hypothermia symptoms

Moderate

- lethargic behavior, pale, cold skin
- acetone (sweet, fruity) breath odor
- shivering, then shivering stops

Severe

- ice cold skin. slow or shallow breaths
- faint, irregular pulse or lack of detectable pulse
- glassy eyes. Mental confusion. Unconsciousness

Hypothermia treatment

Moderate

- move casualty to shelter, give warm nutritious fl
- replace wet clothing with warm clothing, blanke
- evacuate in recumbent position

Severe

- maintain airway
- apply additional heat
- evacuate as soon as possible

Summary

Questions